

# TRANSFLECTIVE LIQUID CRYSTAL DISPLAY

## Abstract

A transfective liquid crystal display comprises a top plate comprising a transparent electrode; a bottom plate bonded to the bottom plate, the bottom plate comprising transfective electrodes of aluminum nitride; a liquid crystal layer interposed between the top plate and the bottom plate; and a light source behind the bottom plate. The transfective electrodes reflect incident ambient light and transmit light emitted by the light source. In the liquid crystal display according to the present invention, the transfective electrodes of aluminum nitride replace conventional transparent pixel electrodes such that an image is generated by the transfective liquid crystal display when either ambient light is incident on the surface of the top plate or when light is generated by the light source.